Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method of estimating ~~for determining~~ a signal-to-interference ratio (SIR) of ~~data~~ baseband signals which are received and processed by ~~based on~~ a data demodulator to provide demodulated symbols to a SIR estimator ~~output~~, the method comprising:

(a) the SIR estimator receiving the demodulated symbols from the data demodulator ~~output~~;

(b) the SIR estimator estimating the average signal power of the demodulated symbols ~~symbol~~ as a function of a median based average power value m_d ~~m_d~~ and a mean based average power value m_e ~~m_e~~ of the demodulated symbols for each quadrant of a quadrature phase shift keying (QPSK) constellation;

(c) the SIR estimator estimating the average effective interference power of the demodulated symbols; and

(d) the SIR estimator calculating the SIR by dividing the estimated average signal power of the demodulated symbols by the estimated average effective interference power of the demodulated symbols.

2. (currently amended): The method of claim 1 wherein the function of the median based average power value and the mean based average power value is to provide a minimum value function for determining a minimum ~~value m~~ value m between the median based average power value m_d and the mean based average power value m_e.

3. (currently amended): The method of claim 2 wherein the average signal power of the demodulated symbols is equal to the magnitude squared of the minimum of the absolute value of the median based average power value $\underline{m_d}$ and the absolute value of the mean based average power value $\underline{m_e}$ averaged over all of the quadrants of the QPSK constellation.

4. (currently amended): The method of claim 1 wherein the demodulator is configured as a multi-user detection (MUD) receiver or a single-user detection (SUD) receiver ~~data signals include demodulated data symbols~~.

5. (currently amended): The method of ~~claim 4~~ claim 1 wherein the ~~data~~ demodulated symbols are included in a burst of a dedicated physical channel (DPCH).

6. (currently amended): The method of ~~claim 4~~ claim 1 wherein the ~~data~~ demodulated symbols are ~~quadrature phase shift keying (QPSK)~~ QPSK data symbols.

7. (currently amended): The method of ~~claim 4~~ claim 1 wherein the ~~data~~ demodulated symbols are binary phase shift keying (BPSK) data symbols.

8. (currently amended): The method of claim 1 wherein step (b) further includes performing the following calculation to determine an average signal power estimate E{ } of the demodulated symbols where:

$E\left\{\left|S_k^d\right|^2\right\}=\left|\min\left(\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|median\left(y_k\left(Q_i\right)\right)\right|\right],\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|mean\left(y_k\left(Q_i\right)\right)\right|\right]\right)\right|^2$ wherein S_k^d is the ~~k-th~~ k-th demodulated desired QPSK signal, $\underline{y_k}$ is the k-th demodulated symbol, $\underline{Q_i}$ denotes ~~i denotes~~ the quadrants $\underline{i}$ of the QPSK constellation, ~~and~~ $\underline{median\left(y_k\left(Q_i\right)\right)}$

~~mean(y_k(Q_i))~~ and $mean(y_k(Q_i))$ denote the median and mean values, respectively, of the symbols in the ~~i-th~~ *i*-th quadrant Q_i, and min([median value], [mean value]) represents a minimum value function for determining a minimum value between the median and mean values.

9. (currently amended): The method of claim 8 wherein step (c) further includes performing the following calculation to determine the average effective interference power E{ } of the demodulated symbols:

$$E\left\{\left|n_k^e\right|^2\right\}=\frac{1}{4}\left\{\sum_{i=1}^{4}\frac{1}{N_{Q_i}}\sum_{k=1}^{N_{Q_i}}\left|y_k(Q_i)-q_i\cdot\sqrt{E\left\{\left|s_k^d\right|^2\right\}}\right|^2\right\}$$

, wherein n_k^e denotes the total effective interference, N_{Q_i} represents the number of the demodulator output symbols belonging to the i^{th} quadrant region after making blind based symbol decisions respectively, $y_k(Q_i)$ is the *k*-th output symbol, which is in the i^{th} quadrant, $\sqrt{E\left\{\left|s_k^d\right|^2\right\}}$ ~~is regarded as~~ represents the average signal amplitude estimate and q_i, for *i* = 1, 2, 3 and 4, respectively, represents the *i*-th QPSK constellation signal point denoted as follows: $q_1=\frac{1+j}{\sqrt{2}},q_2=\frac{-1+j}{\sqrt{2}},q_3=\frac{-1-j}{\sqrt{2}},q_4=\frac{1-j}{\sqrt{2}}$, where *j* is an imaginary number.

10. (currently amended): The method of claim 9 wherein step (d) further includes performing the following calculation to determine the SIR of the demodulated symbols:

$$SIR=\frac{\left|\min\left(\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|median(y_k(Q_i))\right|\right],\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|mean(y_k(Q_i))\right|\right]\right)\right|^2}{\frac{1}{4}\cdot\left\{\sum_{i=1}^{4}\frac{1}{N_{Q_i}}\cdot\sum_{m=1}^{N_{Q_i}}\left|y_m(Q_i)-q_i\cdot\sqrt{E\left\{\left|s_m^d\right|^2\right\}}\right|^2\right\}}\quad C$$

$$SIR = \frac{\left|\min\left(\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|median\left(y_k(Q_i)\right)\right|\right],\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|mean\left(y_k(Q_i)\right)\right|\right]\right)\right|^2 - C}{\frac{1}{4}\cdot\left\{\sum_{i=1}^{4}\frac{1}{N_{Q_i}}\cdot\sum_{k=1}^{N_{Q_i}}\left|y_k(Q_i)-q_i\cdot\sqrt{E\left\{\left|s_k^d\right|^2\right\}}\right|^2\right\}}$$

where C is a correction term determined by performing the following calculation:

$$\cancel{C = \left|\left[\frac{1}{4}\sum_{i=1}^{4}\left|median\left(y_k(Q_i)\right)\right|\right]^2 - \left[\frac{1}{4}\sum_{i=1}^{4}\left|mean\left(y_k(Q_i)\right)\right|\right]^2\right|}$$

$$C = \left|\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|median\left(y_k(Q_i)\right)\right|\right]-\left[\frac{1}{4}\cdot\sum_{i=1}^{4}\left|mean\left(y_k(Q_i)\right)\right|\right]\right|^2 .$$

11. (currently amended): The method of ~~claim 1~~ claim 9 wherein step (d) further includes performing the following calculation to determine ~~further comprising calculating~~ a correction term C: ~~wherein~~ C = $\left|m_d - m_e\right|^2$ where $m_d = \frac{1}{4}\cdot\sum_{i=1}^{4}\left|median\left(y_k(Q_i)\right)\right|$ and $m_e = \frac{1}{4}\cdot\sum_{i=1}^{4}\left|mean\left(y_k(Q_i)\right)\right|$.

12. (currently amended): A method of estimating ~~for determining~~ a signal-to-interference ratio (SIR) of a sequence of data symbols ~~bits~~, the method comprising:

(a) receiving the sequence of data symbols ~~bits~~;

(b) estimating the average signal power of the sequence of symbols ~~bits~~ as a function of a median based average power value m_d ~~md~~ and a mean based average power value m_e ~~me~~ of the symbols ~~bits~~;

(c) estimating the average effective interference power of the sequence of symbols ~~bits~~; and

(d) calculating the SIR by dividing the estimated average signal power of the sequence of symbols ~~bits~~ by the estimated average effective interference power of the sequence of symbols ~~bits~~.

13. (currently amended): The method of claim 12 wherein the function of the median based average power value and the mean based average power value is to provide a minimum value function for determining a minimum ~~value m~~ value m between the median based average power value m_d and the mean based average power value m_e.

14. (currently amended): The method of claim 13 wherein the average signal power of the sequence of symbols is equal to the magnitude squared of the minimum of the absolute value of the median based average power value m_d and the absolute value of the mean based average power value m_e averaged over all of the quadrants of a quadrature phase shift keying (QPSK) constellation.

15. (currently amended): The method of ~~claim 12~~ claim 14 wherein step (d) further includes performing the following calculation to determine ~~further comprising calculating~~ a correction term C: ~~wherein~~ C = $|m_d - m_e|^2$, where $m_d = \frac{1}{4} \cdot \sum_{i=1}^{4} |median(y_k(Q_i))|$ and $m_e = \frac{1}{4} \cdot \sum_{i=1}^{4} |mean(y_k(Q_i))|$, y_k is the k-th symbol in the sequence of symbols, Q_i denotes the quadrants i of the QPSK constellation, and $median(y_k(Q_i))$ and $mean(y_k(Q_i))$ denote the median and mean values, respectively, of the symbols in the i-th quadrant Q_i.